ABSTRACT

The invention provides an exposure apparatus that outputs a stable photographic quality image unaffected by variations in ambient temperature, by suppressing the effects of the temperature variations and achieving accurate grayscale reproduction. In the exposure apparatus, input grayscale data P4 is converted into corrected grayscale data by using a conversion table for correcting for the nonlinearity of exposure density, and grayscale exposure is performed on a photosensitive material by controlling exposure conditions in an exposure head based on the corrected grayscale data; here, the conversion table actually comprises a plurality of conversion tables one for each designated temperature region, and a temperature detector is provided for detecting the ambient temperature, with provisions made to select an appropriate one of the conversion tables under the control of select data in accordance with the temperature data supplied from the temperature detector. The exposure apparatus can thus achieve accurate grayscale reproduction and output a stable photographic quality image even when the ambient temperature varies.